



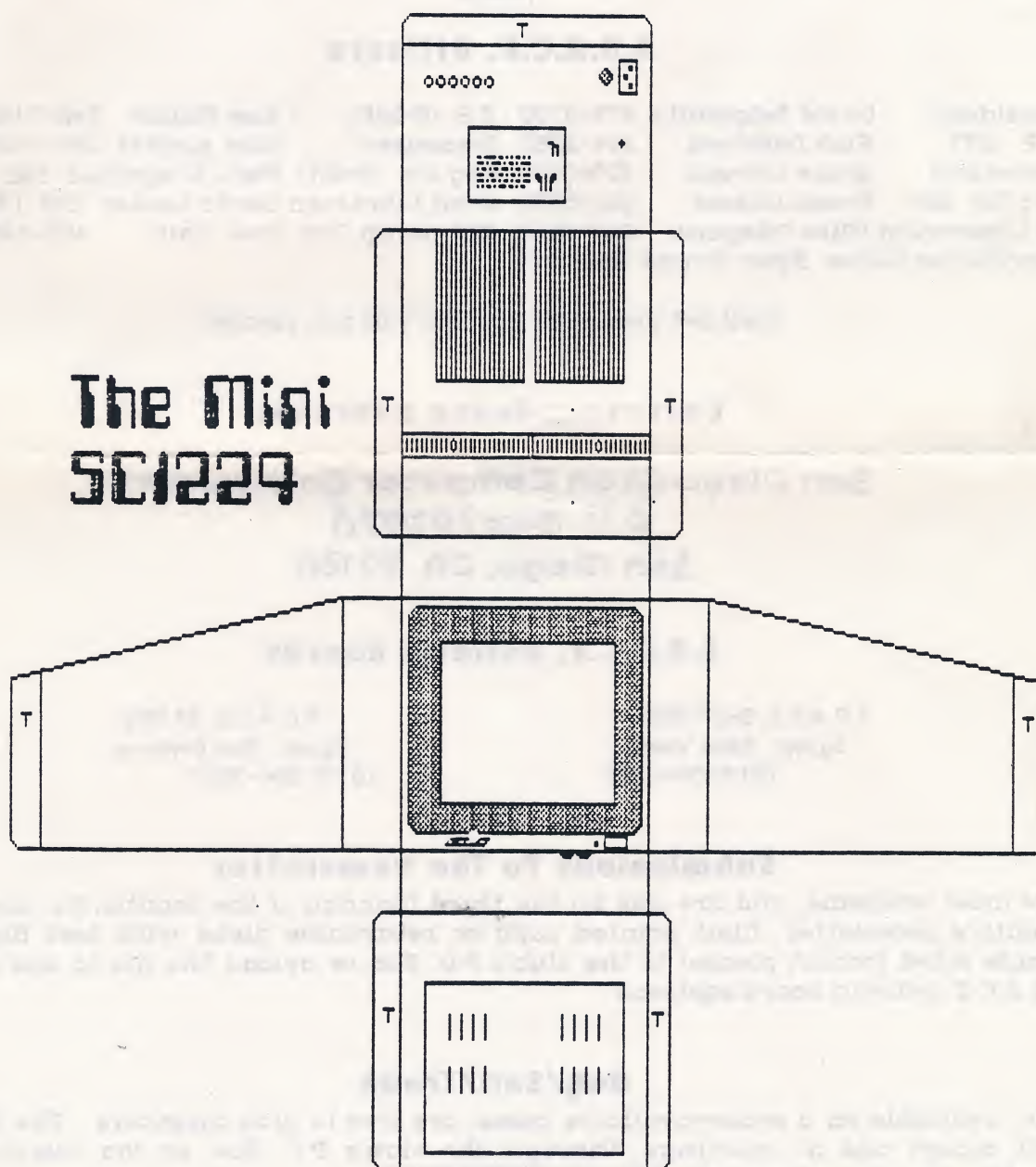
The I/O Connector

The newsletter of the San Diego Atari Computer Enthusiasts

August 1987

(SDACE * P.O. BOX 203076 * SAN DIEGO * CA *

The Mini
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The San Diego Atari Computer Enthusiasts

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(Call between 5:00 pm and 9:00 pm please)

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S.D.A.C.E. ST BBS
Sysop: Rick DeHaven
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Submissions To The Newsletter

are most welcome, and are due by the third Monday of the month, for the next month's newsletter. Mail printed copy or returnable disks with text files (ST single sided format please) to the club's P.O. Box, or upload the file to one of the S.D.A.C.E. bulletin board systems.

Buy/Sell/Trade

ads, available on a space-available basis, are free to club members. The Editor will accept ads at meetings, through the club's P.O. Box, or via telephone. Deadline for classifieds is the same as articles.

From the President

Time to bring up a subject that is from the seamier side of compu-terdom: that of software piracy. A reminder to all members, SDACE does not and will not allow any form of piracy at meetings or their other functions. This includes not only software, but hardware. To quote my parents in my younger days, "Ignorance of the law is no excuse." To the seller this means know what you have before you sell it. To the buyer, it means know what you are buying.

There will be repercussions to any member of SDACE who engages in this activity during meetings of SDACE sponsored events. If you are in this situation, you may think, big deal, I don't need you. Well, SDACE does not need you as well. SDACE has tried hard to obtain a meeting place that will allow private and commercial vendor support. Do not let the few destroy that for all. I don't think I need to go farther into the psychology and economics of piracy, they have been well discussed.

On to other matters: the 8-bit library is doing well under the direction of Dave and Marge Becker. They have a GENie account and are bringing you the best in public domain software and texts. The ST library, likewise, is booming. The monies that come into the libraries are used to maintain and add to the collection. This includes buying new disks and paying for the allocated time on GENie. Extra monies are sent into the general SDACE fund for use of both groups. So, support your 8-bit/ST library, and buy a disk.

Let's talk about the newsletter. Peter is doing a great job. He has had the usual problems of time and get-ting board members to write their articles (sorry Pete) as well as some unusual problems this year. Not only should you give him a hand but also take a little time and write an article. I know we have many cre-ative people out there, I have talked to you.

Everyone who wants to learn more about the Magic Sac on the ST, be sure and attend the ST Workshop on the second Thursday of the month! It's for everyone, so bring your questions, you'll find someone to answer them.

Well, that's about all I have for now. Till next month, Happy Computing.

-Dave Delgadillo

8-bit Vice Prez

Our July meeting was attended by a vocal group of folks who are interested in firing up the 8-bit club. Looks like we have the makings to do just that. We have nice facilities thanks to Paul Woods. We have our own BBS thanks to Eddie Woods. We have an excellent librarian couple in the Beckers. We have our own slush fund supported by the disk of the month. We even have our own 800XL computer and color TV (not including the BBS). All we need are organized meetings and a purpose in life.

Although we covered many ideas at the July meeting, the fundamental result was we settled on a course for future meetings. First, our future meetings will begin exactly on time. We will devote 10 minutes to club administration, 20 minutes to the librarian and the disk of the month, and then we will have 1 hour or less on the main theme for the meeting. We have good ideas for themes, such as a live demo on using San Diego BBSs, security, data bases, mathematics, etc. One could easily list ten years worth of meeting themes. We will settle on these themes six months in advance, and publish them in the newsletter. That way folks who have to travel far can schedule their attendance accordingly. After the theme material we will take a break and then open the meeting up to general questions, group projects, or specific help. There will be several computers at every meeting.

You should receive this newsletter after the August 8-bit meeting. If all went well, I will have discussed how to use the joystick ports to control things. This will be a foundation for other group projects. I will have a live demo of this using a 400 connected to a rowing machine (exercise type). I will document this so those of you who missed it can pick up documentation at future meetings. You will see this again.

At our September meeting, we will cover all the necessary facts you must know. Modems are cheap, so if you are interested, this is your meeting. We will probably have meetings every month. No one wanted to skip any months and that's fine with me. We have too many neat things to try. It is going to be my pleasure to work with such a charged up group of people. Who knows, some club members might even get interested in

(Please see 8-BIT TALK, page 7)

Is the 8-bit Dead?

Reprinted from The PACUS Report

(Editor's note: I am including this half-humorous editorial, whose content I do not 100% agree with, for your information. I invite responses to this article, and will try to print all that I receive. This article is funny (and nothing but joking conjecture, with respect to the examples cited, so far as I know), but is indicative of a very serious problem we as a computer community are facing: the eventual death of the 8-bit machines. My fire-and-brimstone sermon response is opposite this page. If you disagree (or agree) with this article, get mad and write to me care of the club's mailing address. Incidentally, I don't recommend putting a Pacman cartridge upside-down into a 1200XL; damage may result.)

Sure, we've been hearing it for a couple of years now, "The Atari 8-bit machines are dead." Although Atari denies this, I've compiled a few interesting facts (note I said facts, not rumors, which in the past is all we have had to go on) that demonstrate clearly to me that the 8-bit is dead.

For instance, if you insert a Pacman cartridge upside down into a 1200XL and turn it on, "Clyde" will appear, saying something that sounds to me like, "I buried an 8-bit!" Scary, isn't it? There are many of these hidden clues all over, if you just look for them.

One of the latest pieces of software that Atari has put out for the 8-bits has been Atari Planetarium. Boot that program and look at the constellation ARA (which, by the way, means Alter in English) with the lines option engaged. Using the stars as dots and the lines as dashes, you can make out, in Morse Code, the phrase "888 IF", which, of course, means that the 8-bits would be 8 years old if they had lived. How can you argue with proof like that? This could not be just an accident.

These hints of the death of the 8-bits have been coming for quite some time. Take a look at the cover of Analog #44. There you will see a picture of what appears to be an operation being performed on an Atari ST. And what is found inside, looking like a malignant tumor, but an Atari 130XE. Although that is pretty blatant, there is also a subtitle clue on that cover. In yellow, on that cover, are

the names of three articles inside the magazine for the 8-bits: Arm your Atari, Ramcopy, and 8-bit Parallel Interface. The initials of these article titles are "A Y A R 8 B P I", which is an anagram for "RIP 8-BIT YAR!". How much clearer could they make it? The 8-bits are not only dead, but they are glad of it.

Still not convinced? You people are hard to please. Ok, grab your copy of the April 1987 issue of Antic. Look at the cover and what do you see? A bunch of IRS men chasing a bunch of guys carrying banners that say "130XE." Now think, what does that mean? I said think! That's right, only two things are inevitable, Death and Taxes. What at first glance appears to be a simple "tax-time" issue, in fact is clear proof that the 8-bits' time is at an end.

These are a few examples of what you can find if you only look with an open mind. But most people don't want to see these things, because they don't want to face the facts.

I can't understand why Atari doesn't just come right out and announce that the 8-bits are dead. It has been proven in the past that charades don't work. When Elvis died in 1963, no one believed the fat lookalike they got to replace him was really Elvis. When the lookalike died in 1977, no one bothered to try to get a replacement. When Paul McCartney died in a car-train accident in the late 60's the remaining Beatles denied it, while all the time giving clues to his death in songs and on album covers, much like the clues showing up for the Atari 8-bits today. We also know that Andy Kaufman is working for Atari, but that is another story.

Like I mentioned before, Death and Taxes are inevitable. So lets raise or glass to our fallen friend, and also toast to our new leader, the ST.

"The King is dead, long live the King."

- John B. Sloop

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September 8-bit meeting will be **Thursday, September 3rd**, (the first Thursday of the month, as always), at the new meeting place in Mira Mesa, at the Woods Clubhouse on Baywood, near Mira Mesa Blvd (see map in the *June 1988 Connector* or call editor for directions). ST workshop/Magic Sac SIG will be same time and date as the 8-bit meeting, at North Park Rec Center, 2719 Howard Ave, in the Adult Room. Normal ST SIG meeting will be on **Monday, September 21st**, at 6:30, also in the North Park Rec Center, in the Social Room. **Mark your calendar!!!**

Turbo BASIC Compiler Problem

By Jeff Colehour & Dick Hearsey

Reprinted from
PUUGET SOUND ATARI NEWS

The new Turbo BASIC system has been discussed in many publications and is truly an outstanding BASIC for the 8-bit Atari. It is not only much faster than Atari BASIC, but it also has a compiler that provides an additional increase in speed for most applications.

A few limitations on the types of BASIC commands that can be used with the compiler have been presented, but we have found another limitation that might be of interest to any one who is considering the Turbo BASIC Compiler.

The problem has to do with arithmetic operations on singly or doubly subscripted variables. The short program below works correctly when using the Turbo BASIC interpreter only, but gives an error when run in the compiled mode. This is followed by a simple work around that does work in the compiled mode.

```
10 REM TURBO BASIC COMPILER
20 REM SUBSCRIPT PROBLEM DEMO
30 DIM MAT(3)
```

```
40 MAT (1) = 1
50 MAT (2) = 2
60 MAT (3) = MAT (1) * MAT (2)
70 PRINT MAT (3)
80 END
```

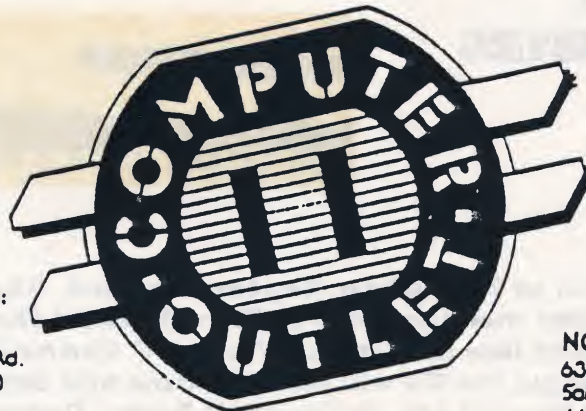
The result of running this in the compiled mode is **ERROR 9 IN LINE 0060: Array or String DIM error**. A fix for this is to change line 60 and add line 65 as shown below:

```
60 Z = MAT (1) * MAT (2)
65 MAT (3) = Z
```

The limitation is apparently that if arithmetic operations or subscripted variables are performed on one side of the operator "=", a subscripted variable cannot appear on the other side. The arithmetic operation is part of the problem, because a statement such as `MAT (2) = MAT(1)` does not cause an error. We have also encountered similar situations in which no error message was given but incorrect results were obtained when running in the compiled mode. If subscripted variables are being used it would be advisable to carefully compare results obtained from the compiled and interpreted modes. This is not a serious limitation, since the work around is fairly easy, but it could require code modifications to permit use of the Turbo BASIC compiler.

CAUTION

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Editorial Response to "Is the 8-bit Dead?"

Mr. Sloop has brought to light a very important fact that no one seems to want to admit: the 8-bit SIG has been stagnating for the past one and a half to two years. When the ST was released in 1985, the 8-bit users (myself included) never dreamed that it would oust the 8-bit as the #1 Atari computer. Little by little, as ST BBSs appeared, and old haunts like the now defunct Rick's Place BBS started supporting the 32-bit computers, 8-bit users seemed to become aware of the fact that the ST was here to stay. That, at least, is my story, and when I was suddenly able to get myself a monochrome 520ST system, I jumped at the chance, forsaking my 8-bit.

Instantly my thinking switched from 8-bit mode to ST. I started seeing the old familiar 800XL in an entirely different light. I've often regretted selling it, but my ST hasn't let me down at all. July marked the one year anniversary of my ST-ism, and I'm happy I made the change.

But I am wandering. I'm here to talk about the 8-bits. Little by little, as the ST gained popularity (it has been out for three and a half years already; time flies), the 8-bitters, I feel, withdrew. Many got ST's, or Amiga's, or clones. Alas, some 8-bits were laid to rest in a closet or under a bed. It was as if the 8-bit had never been, for so many years, a leading pioneer in home computer technology.

That the Atari 400 and 800 have, as much as the Apple II, the PET CBM, and all those other early computers, helped shape what one thinks of when they hear the word "computer" cannot be denied. Back when the 800 cost over a grand (about 20 to 25 times its current market value), and people first started trying to make it do more than just play games, things were different than they are now.

Now, in the aftermath of price wars with Commodore and Apple, the Atari 8-bits are almost valueless. It's true. People paid \$1080 for an 800 with 16K, and sold it for \$50 with 48K, "B" ROMs, and GTIA. That's not a good investment. And few expect otherwise of the new machines: even the ST's are experiencing the same situation, of people buying, then watching the price fall. It's grossly unfair.

What happened to the 8-bits? Why did

they fall so easily?

Well, for many reasons. Mainly, a little thing called the Commodore 64 came around. Offering good graphics, excellent sound, and most of all, a comparatively low price, the C64 did well immediately. It was helped by the successes of the Vic 20, the first color computer under \$300, and, of course, Willie Shatner. It was cheap (\$595 vs. \$1000 for an 800), offered lots of memory (64K; although more like 37K after taxes), and most of all, it was something new.

The rest, of course, is history. Atari had to lower the prices of the 400 and 800 which, compared to the 64, were built like cadillacs. They had to put 48K (\$300 retail worth of hardware then) in the 800's. They stopped making money, and began sinking. Atari tried to come back with the 1200XL, but as we all know, it offered nothing new, no more memory than we already had, poor compatibility, and nothing really exciting.

As popularity for the 8-bits waned, software followed suit. Piracy definitely played a very, very large part of it (slow as everyone is to accept the truth and the guilt), and soon the interest in the 8-bits was disappearing.

By the time the 800XL's came out, most of the damage was done, and Atari had lost the war. They had done well, put up a good fight, and had taken a not-so-close second place. The other losers in the war, Timex, Texas Instruments, Mattel, Coleco, and IBM, all disappeared entirely. It is a credit to the soul of the 8-bit users that they held on, and remained a force in the low-end computing field. But the computer division of Atari was losing money, and we would have almost surely been sold or liquidated by now, but for the acquisition of the Atari Home Computer division by Jack Trammiel, the wizard who had made Commodore what it was.

Now, the ST's have put the 8-bits out even more than the Commodore 64. 8-bit hackers bought new ST's, feeling that the 8-bits were lost causes. The people left are feeling cheated by the ST's, I think, and don't like what's been done to the 8-bits. I think that that is fair to say. With everyone more or less acknowledging that the 8-bits, if not dying, were

(Please see EDITORIAL, page 8)

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unless otherwise noted

Code	Name	Computer	Baud	Number
3	Fred's Place	8-bit	2400	560-8173
1	Polaris	8-bit	300	566-6210
3	The Highlands	8-bit	3/12	298-8475
	The Atari Fortress	8-bit	3/12	426-4253
3	8-bit SDACE	8-bit	3/12	566-3430
1	Penthouse Suite	8-bit	3/12	279-2722
1	Sherwood Forest	8-bit/ST	3/12	276-5607
1	! Aardvark	8-bit/ST	2400	272-5553
4	ST-SDACE	ST	3/12	284-3821
4	ST MIDI Connection	ST	2400	452-7535
4	Emerald City BBS	ST	1200	475-9498
4	! Computer Blvd.	ST	2400	589-0565
4	Computer Plus BBS	ST	3/12	691-7862
4	* Computer Outlet	ST	2400	282-6815

1 = TCxe, 2 = Forem, 3 = BBS Express
4 = Michtron (ST)

(* = Limited hours, ! = Magic Sac support)

*For corrections or additions, please
contact the editor!*

17 ways to kill almost any organization:

By Robert Handley

Reprinted from the CIA ROM

1. Don't attend meetings, but if you do, arrive late.
2. Be sure to leave before the meeting is closed.
3. Never have anything to say at the meeting; wait until you get outside.
4. When at meetings, vote to do everything, then go home and do nothing.
5. The next day, find fault with officers and members.
6. Take no part in the organization's affairs.
7. Be sure to sit in the back so you can talk things over with a friend.
8. Get all the organization will give you, but don't give the organization anything back in return.
9. Never ask anyone to join the organization.
10. At every opportunity, threaten to resign and try to get others to do the same.
11. Talk cooperation, but don't cooperate.
12. If asked to help, say you haven't the time.
13. Never read anything pertaining to the organization.
14. Never accept an office, as it is easier to criticize than to do things.
15. If appointed to a committee, never give any time or service to the committee.
16. If you receive a renewal notice, ignore it.
17. Don't do any more than you have to, and when others use their abilities to help the cause, howl because the organization is run by a clique.

certainly stagnating, the 8-bit sector of SDACE began to wither.

I'm talking too much again: sorry. I'll shut up soon.

The fact is, the 8-bit SIG needs your support or it will not be around in any form whatsoever in a year or so. You 8-biters have to face it: ***someday, there will be no 8-bit SIG in SDACE.*** One way or the other, the 8-bits will not last forever. Someday Atari will finally blow the whistle, order everyone out of the water, and announce the removal of the XE line. On GENie, there is a special roundtable for computers that have been pulled off the line. It is basically a graveyard, occupied by TI-99, TS-1000 and TRS-80 users. Someday, Atari 8-bit owners may be there.

What you have to ask yourself **right now** is, do I want this to happen soon? Do I want the formal death of the Atari 8-bits to happen **sooner or later**?

Maybe my words seem harsh or unnecessary. I don't think so. The 8-bit SIG is looking better than it has in the past year, but it is still headed for destruction if something is not done.

It's undeniable: support for SDACE from the 8-bit membership has been terrible. Support of the newsletter by the 8-bit membership has been zero. Most don't go to meetings, or call the SDACE 8-bit BBS. You're showing us that you don't care.

If you own an 8-bit, please, if you do nothing else today, ask yourself the following questions: 1) Do I believe that the 8-bits are beyond hope, 2) Am I ready to surrender all support from software developers and the user groups, and 3) Do I honestly care, or am I only holding on to the 8-bit because I can't possibly get a good price for it, and I can't afford a new computer anyway.

I will lay it on the line: **there is hope!** In the Beckers and Ron Miller, the 8-bit SIG has its best chance for rejuvenation it has had in two years. The Beckers are providing a **highly successful** disk of the month program, offering low-cost Public Domain software. \$75 was earned at one meeting! That's terrific! And Ron will get organization back into the meetings, will help get things moving and interesting, and will provide the 8-bits with something they have been lacking for the longest time: leadership. Another fact to face: **No one has been available in the club who is willing to devote himself to the 8-bits.** Dave

Delgadillo neither owns nor uses an 8-bit machine; how can he be expected to meet the needs of the 8-bit users? Him and most of the officers in SDACE are interested in the ST, not in the 8-bits. I freely admit it: I am included in that list. I want to help the 8-biters, I really do, but I'm not an 8-bit owner. That's why it's so great to see some people actually taking a stand to dedicate themselves to the 8-bit SIG and help give it a chance for survival.

So, you 8-bit users have several things going for you:

1) You have a new Vice President, who will give his all to help keep the 8-bit SIG churning;

2) You have **excellent** disks of the month, filled with software, for a nominal contribution to SDACE;

3) You have a new meeting place, **which allows vendors and sales of equipment and software by anyone;** and

4) You have a recent increase in support by Atari and other companies, in the form of some new titles and hardware releases.

The 8-bit SIG does not have to pass away in the near future. 8-biters will have one last chance to start supporting their club. Support has **got** to increase, or, and I truly believe this, there will be no 8-bit SIG this time next year. I'm talking ***nothing!***

On the line, here is what you need to do if you care at all about your 8-bit:

1) **Go to meetings.** See the new meeting place in Mira Mesa. If you can't even give this much, forget everything.

2) **Support the Disk of the Month.** If you want to increase the 8-bit hardware in the club, money must be earned by the 8-bit SIG. Buy a \$5 disk and attain that goal.

3) **Help me help you.** Write a review of one of the many pieces of software available, or any kind of article you can think of. I get **no** support or feedback from any 8-bit users. I'm no miracle worker, but to be fair, no one contributes for the ST's either.

Sorry if I offended anyone with this evangelistic outpouring, but it needed to be said. I hope you won't let the 8-bit SIG die.

- Peter Payne

1040 ST Whine

Reprinted from Bay Area Atari Users' Group newsletter

Does your 1040 whine? When you boot up do you get the mosquito repellant? If so, this is for you. It is the *official* Atari 1040 1040 power supply fix for units with a high-pitched whine emitting from them. The problem is the switching power supply used for the RS-232 port. It is supposed to switch at around 18khz, but due to parts tolerance it sometimes falls lower than that, the result being an irritating audible "whine" or "squeal". It has falsely been described as a "drive whine" and defective power supply modules. The circuitry is actually on the motherboard. This mod also cures a video "flutter" which sometimes occurs. Faint horizontal bars float up and down the screen. If you are not faint of heart, here are the instructions for the modification.

Note: *I do not recommend this mod if you are not familiar with electronics!* You will be playing with the power supply, and if done incorrectly, you could fry your ST! I am providing the information so the folks who are out of warranty can do it themselves. Also, some dealers may not be familiar with the problem. I do not accept any responsibility for any permanent mushroom clouds you may cause. Okay, here goes:

Unplug everything, especially the computer, then take the case off your 1040ST. Remove the power supply module. It's pretty straight-forward, as there is a plus for the wires. Untwist the grounding tabs on the shield and lift the shield off the printed circuit board. The parts to change are on the motherboard, beneath where the power supply was, and to the right of the ROM's.

Change:

Part No.	From	To
R17	1 Ohm	5 Ohms
L4	100 uH	220 uH
C28	100 pF	330 pF

Now, looking at the 1040 from the front, here is where the stuff is: R17 is a 1 Ohm resistor (brown-black) and sits below C26 (yes, that *is* a capacitor!). L4 is the resistor looking thingy (a moulded coil) to the right of the IC, a TL497. Its color code is brown-black-brown. The capacitor C28 is located

on the left of the IC, next to a larger black capacitor. Its color code is also brown-black-brown. While these locations should be accurate, please note that they could, and may, change at any time in your machine. It is very important for you to replace the correct components.

You will need a good soldering iron, solder, and a de-coldering vacuum bulb-pump, solder wick or braid. The replacement parts should have a tolerance of plus or minus 5%. If not, it's time for the service center! The only part which is actually hard to find is the inductor (moulded coil) L4. The part number 35F1885 and is called a Deci-Ductoe. They cost around \$4 each.

Well, that's about it. Hopefully, after this point you will power up to a blissful silence and have saved \$\$\$ to boot! Good luck...

(Note: This modification is to be performed at your own risk. If you're not sure what you're doing, don't touch anything. Get a tech to do it.

A good place to procure parts is Gateway Electronics, off of Convoy near Woo Chee Chong's; Industrial Liquidators, also off Convoy near Supercuts, across from K-Mart; or, of course, Radio Shack.)

(8-BIT TALK, from page 3)
programming in FORTH and I will have some company. ?C-YA.

Ron Miller is a charter member of SPACE, having been in the club since it's formation "way back when". A Forth junkie, he has participated in the club since its formation. Let's all welcome him to the slate, and give him any and all support and help we can. He can't resurrect the 8-bit SIG from its gloomy, tired existence alone; he needs YOUR help.

**8-Bit Users, Go To
The Meeting!
Monday, September 3rd!**